



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,022	10/11/2005	Speith-Herfurth Angela	05581-00141-US	6687
23416 7590 02/16/2011 CONNOLLY BOVE LODGE & HUTZ, LLP P O BOX 2207 WILMINGTON, DE 19899				
EXAMINER HUANG, CHENG YUAN				
ART UNIT 1787		PAPER NUMBER		
MAIL DATE 02/16/2011		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/553,022

Applicant(s)

ANGELA ET AL.

Examiner

CHENG HUANG

Art Unit

1787

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 2-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 2-5, 8-11, 13, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demeuse (U.S. Patent No. 6,165,599) in view of Crass et al. (U.S. Patent No. 4,786,533).
4. Regarding claim 16, Demeuse teaches a multilayered transparent biaxially oriented polypropylene film (col. 3, lines 7-9, lines 65-67, col. 4, line 36) which comprises a base layer (polypropylene/hydrocarbon layer, col. 3, lines 7-9, lines 65-67, col. 4, line 36) and a first cover layer (functional layer, col. 3, lines 65-67, col. 4, lines 57-59), wherein the base layer has a hydrocarbon resin (col. 3, lines 54-63) and the first cover layer has a cold sealing adhesive coating on its outer surface (cold seal adhesive layer as functional layer, col. 5, lines 10-15), a

second cover layer, wherein the second cover layer is applied to the diametrically opposite surface of the base layer (second functional layer on the other side of core, col. 3, lines 64-67) and the base layer is between the first cover layer and the second cover layer (first functional layer, core, second functional layer, col. 3, lines 64-67) and wherein a release layer is applied to the surface diametrically opposite the first cover layer as the outer layer (col.4, lines 58-61 and col. 5, lines 16-18), whose surface is deemed to have a low adhesion in relation to cold sealing coatings since it is of a releasing nature.

5. Demeuse fails to teach wherein the first cover layer comprises 95 to <100 weight-percent propylene polymers, in relation to the weight of the cover layer.
6. However, Crass et al. teaches a multilayered transparent polypropylene film (See Abstract) wherein the first cover layer is comprises about 93.2 to 99.0 weight percent propylene polymers (col. 3, lines 33-41), which overlaps the claimed range of 95 to <100 weight-percent propylene polymers, in relation to the weight of the cover layer.
7. It would have been obvious to one of ordinary skill in the art at the time of the invention to include propylene polymers in first cover layer of Demeuse in an amount including those of the claimed range for stability in rigidity (Crass et al., col. 1, lines 18-21 and 40-41).
8. Regarding claim 17, Demeuse teaches wherein the first cover layer has a thickness approximately 2.5 to 3.8 μm (col. 4, lines 25-27), which overlaps the claimed range of greater than 0.1 μm .
9. Regarding claim 2, Demeuse teaches wherein the base layer contains an isotactic polypropylene (col. 3, lines 14-20). While Demeuse does not explicitly disclose the melting point of the isotactic polypropylene, it is inherent that the melting point of isotactic polypropylene is

not less than about 140°C, as evidenced by Crass et al. (col. 2, lines 16-22), which meets the claimed range of 155-165°C.

10. Regarding claim 3, Demeuse teaches wherein the base layer contains the hydrocarbon resin in a quantity of up to about 15 weight percent (col. 2, lines 54-59), which overlaps the claimed range of 5 to 20 weight-percent, in relation to the weight of the base layer.

11. Regarding claim 4, Demeuse wherein the hydrocarbon resin contains a non-hydrogenated styrene polymer, a methylstyrene- styrene copolymer, cyclopentadiene polymer, an α -pinene polymer, β -pinene polymer, or terpene polymers and hydrogenated compounds thereof, or hydrated α -methylstyrene-vinyl toluene copolymer or mixtures thereof (col. 3, lines 29-55).

12. Regarding claim 5, Demeuse teaches wherein the hydrocarbon resin has a softening point of less than about 140°C (col. 3, lines 58-59), which overlaps the claimed range of 100 to 160°C.

13. Regarding claim 6, Demeuse teaches wherein the first cover layer is synthesized from propylene terpolymers (col. 5, lines 6-8).

14. Demeuse fails to teach wherein the propylene copolymers and terpolymers having a propylene content of at least 80 weight-percent in relation to the polymer.

15. However, Crass et al. teaches a multilayered transparent polypropylene film (See Abstract) wherein the first cover layer is synthesized from propylene copolymers or propylene terpolymers or mixtures of these polymers, wherein the propylene copolymers and terpolymers has a propylene content of about 93.2 to 99.0 weight percent (col. 3, lines 33-41), which falls within the claimed range of at least 80 weight-percent in relation to the polymer.

16. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the propylene content of the propylene copolymers and terpolymers of Demeuse,

including those of the claimed range for stability in rigidity (Crass et al., col. 1, lines 18-21 and 40-41).

17. Regarding claim 8, Demeuse teaches wherein the second cover layer made of polyolefinic polymers (col. 4, lines 58-61 and col. 5, lines 6-8).

18. Regarding claim 9, Demeuse wherein a release layer is applied to the surface diametrically opposite the first cover layer as the outer layer (col.4, lines 58-61 and col. 5, lines 16-18), whose surface is deemed to have a low adhesion in relation to cold sealing coatings since it is of a releasing nature.

19. Regarding claim 10, Demeuse teaches wherein the release layer is a release film and/or a second coextruded cover layer (col. 5, lines 16-18, col. 6, lines 28-32).

20. Regarding claim 11, Demeuse teaches wherein the base layer contains an antistatic agent (col. 6, lines 60-61).

21. Regarding claim 13, Demeuse teaches wherein the first cover layer contains antiblocking agent (col. 6, line 61).

22. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Demeuse (U.S. Patent No. 6,165,599) in view of Crass et al. (U.S. Patent No. 4,786,533) and further, in view of Wilkie et al. (U.S. Patent No. 5,482,780).

23. Demeuse as modified by Crass et al. is relied upon as disclosed above.

24. Regarding claim 7, Demeuse as modified by Crass et al. fails to teach the surface of the first cover layer being treated using corona, plasma, or flame.

25. However, Wilkie teaches a multilayered biaxially oriented polypropylene film (col. 5, lines 1-7) wherein the surface of the first cover layer is pretreated using corona or flame (col. 4, lines 27-31).

26. It would have been obvious to one of ordinary skill in the art at the time of the invention to using corona or flame treatment on the surface of the first cover layer of Demeuse as modified by Crass et al. to improve the bond between the surface of the first cover layer and the cold sealing adhesive (Wilkie et al., col. 4, lines 24-27).

27. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demeuse (U.S. Patent No. 6,165,599) in view of Crass et al. (U.S. Patent No. 4,786,533) and further, in view of Murschall et al. (U.S. Patent No. 5,436,041).

28. Demeuse as modified by Crass et al. is relied upon as disclosed above.

29. Regarding claim 12, Demeuse as modified by Crass et al. fails to teach neutralization agents and stabilizers.

30. However, Murschall et al. teaches the polypropylene film wherein all layers of the film contain neutralization agents and stabilizers (col. 7, lines 57-63).

31. It would have been obvious to one of ordinary skill in the art at the time of the invention to include neutralization agents in the film of Demeuse as modified by Crass et al. to control pH.

32. Regarding claim 15, Demeuse as modified by Crass et al. fails to teach wherein said antistatic agent is tertiary aliphatic amine.

33. However, Murschall et al. teaches the polypropylene film wherein said antistatic agent is tertiary aliphatic amine (col. 8, lines 3-7).

34. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a tertiary aliphatic amine in the film of Demeuse as modified by Crass et al. for eliminating the effects of static electricity.

35. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demeuse (U.S. Patent No. 6,165,599) in view of Crass et al. (U.S. Patent No. 4,786,533) and further, in view of Fatica et al. (U.S. Patent No. 6,033,786), Dallman et al. (U.S. Patent No. 4,572,854), and Murschall et al. (U.S. Patent No. 5,436,041).

36. Demeuse as modified by Crass et al. is relied upon as disclosed above.

37. Regarding claim 18, Demeuse as modified by Crass et al. teaches wherein the first cover layer has a thickness in the range approximately 2.5 to 3.8 μm (about 0.1 to 0.15 mil, Demeuse, col. 4, lines 25-27), which overlaps the claimed range of from 0.3 to 3 μm .

38. Demeuse as modified by Crass et al. fail to explicitly disclose neither the thickness of the second cover layer nor the total thickness of the film.

39. However, Fatica et al. teaches a multilayered transparent biaxially oriented polypropylene film (See Abstract) wherein the second cover layer has a thickness of approximately 0.073 to 8.8 μm (functional layer is between about 1.25 and 43.5% the thickness of the core layer which is about 0.23 to 0.8 mil, col. 7, lines 8-18), which encompasses the claimed range of from 0.5 to 2 μm .

40. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the thickness as taught by Fatica et al. for the first cover layer of Demeuse as modified by Crass et al. for flexibility in food packaging.

41. Dallmann et al. teaches wherein the cold sealing adhesive coating has a thickness of between 1 and 3 microns (col. 2, line 66-col. 3, line 1).
42. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the thickness as taught by Dallmann et al. for the cold sealing adhesive coating of Demeuse for controlling cost (Dallmann et al., col. 2, lines 66-67).
43. Given the thickness of the layers as disclosed above, and in addition to the thickness of the base layer of Demeuse to be approximately 5.8-22.8 μm (about 0.23 to 0.9 mil, col. 4, lines 23-25), the film has a total calculated thickness of approximately 9 to 38 μm , which falls within the claimed range of from 4 to 60 μm .
44. Regarding claim 19, Demeuse as modified by Crass et al. fail to explicitly disclose the thicknesses of the first cover layer, second cover layer, and the total film.
45. However, Fatica et al. teaches a multilayered transparent biaxially oriented polypropylene film (See Abstract) wherein the first and second cover layers each have a thickness of approximately 0.073 to 8.8 μm (functional layer is between about 1.25 and 43.5% the thickness of the core layer which is about 0.23 to 0.8 mil, col. 7, lines 8-18), which encompasses the claimed range of from 0.5 to 2 μm .
46. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the thickness as taught by Fatica et al. for the first and second cover layers of Demeuse as modified by Crass et al. for flexibility in food packaging.
47. Dallmann et al. teaches wherein the cold sealing adhesive coating has a thickness of between 1 and 3 microns (col. 2, line 66-col. 3, line 1).

48. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the thickness as taught by Dallmann et al. for the cold sealing adhesive coating of Demeuse for controlling cost (Dallmann et al., col. 2, lines 66-67).

49. Given the thickness of the layers as disclosed above, and in addition to the thickness of the base layer of approximately 5.8-22.8 μm of Demeuse to be (about 0.23 to 0.9 mil, col. 4, lines 23-25), the film has a total calculated thickness of approximately 6.9 to 43 μm , which encompasses the claimed range of from 6 to 25 μm .

50. Regarding claim 20, as set forth in paragraphs 18-20 above, Demeuse in combination with Crass discloses first cover layer wherein the propylene copolymers and terpolymers have a propylene content of at least 80 weight percent in relation to the polymer. Further, Demeuse teaches wherein the first cover layer contains antiblocking agent (Crass, col. 6, line 61).

51. Demeuse as modified by Crass et al., Dallmann et al., and Fatica et al. fails to teach neutralization agents and stabilizers.

52. However, Murschall et al. teaches the polypropylene film wherein all layers of the film, which includes the first cover layer contain neutralization agents and stabilizers (col. 7, lines 57-63).

53. It would have been obvious to one of ordinary skill in the art at the time of the invention to include neutralization agents in the film of Demeuse as modified by Crass et al., Dallmann et al., and Fatica et al. to control pH.

Response to Arguments

54. Applicants' arguments filed 16 December 2010 have been fully considered but they are not persuasive.

55. Applicants amended independent claim 16 to include the limitations of cancelled claim 21.

56. Applicants argue "Examiner argues mainly that it is obvious to apply a cold seal layer onto the surface of a top layer of a multilayer film including a base layer and a top layer".

57. However, Examiner did not argue that "it is obvious" given that the primary reference of Demeuse teaches the claimed limitation.

58. Applicants argue that the prior art does not recognize the criticality of having a cold seal layer or "any specific properties of the cold seal properties or how improve those".

59. However, given that Demeuse discloses cold seal layer identical to that presently claimed, it is clear that Demeuse has already recognized the criticality of the cold seal layer. In response to Applicants' argument that the prior art does not recognize the specific properties of the present application, the fact that Applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Therefore, even though the prior art does not recognize the same advantage found by Applicants, it clearly meets all requirements of the present claims.

Conclusion

60. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

61. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

62. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **CHENG YUAN HUANG** whose telephone number is (571) 270-7387. The examiner can normally be reached on Monday-Thursday from 8 AM to 4 PM.

63. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho, can be reached at 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

64. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 1787

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. H./

Cheng Yuan Huang

Examiner, Art Unit 1787

February 9, 2011

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1787